



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,419	05/11/2001	Thomas J. Moravec	589.102US1	7680

7590 11/07/2003  
MARK A. LITMAN & ASSOCIATES, P.A.  
York Business Center, Suite 205  
3209 W. 76th St.  
Edina, MN 55402

EXAMINER

BISSETT, MELANIE D

ART UNIT	PAPER NUMBER
----------	--------------

1711

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 1003

Application Number: 09/854,419  
Filing Date: May 11, 2001  
Appellant(s): MORAVEC ET AL.

\_\_\_\_\_  
Mark A. Litman  
For Appellant

**EXAMINER'S ANSWER**

**MAILED**

NOV 06 2003

**GROUP 1700**

This is in response to the appeal brief filed 07 August 2003.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 1, 3-10, 13-17, and 19.

Claim 18 has been canceled in a previous amendment.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows:

The generic issues on Appeal are whether a prima facie case of obviousness has been provided for rejection of the claims over (1) Bhalakia et al. (US 5,757,459 A) in view of Ormsby et al. (US 4,889,413 A) and (2) Bhalakia et al. in view of Rosthauser et al. (US 6,107,395 A).

**(7) Grouping of Claims**

The rejection of claims 1, 3-10, 13-17, and 19 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

5,757,459 A	BHALAKIA et al.	5-1998
4,889,413 A	ORMSBY et al.	12-1989
6,107,395 A	ROSTHAUSER et al.	8-2000
6,187,444 B1	BOWLES, III et al.	2-2001

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 3-10, 13-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhalakia et al. in view of Ormsby et al.

Note that at this time, the examiner interprets “sandwiched between” of claim 1 *not* to preclude the presence of layers between the photochromic layer and polymer layers. A photochromic layer can still be “sandwiched between” two polymer layers via adhesive layers.

Bhalakia et al. discloses a multifocal optical lens that includes the general laminable structure of the present invention—up to two polycarbonate sheets (col. 10 line 32) that have a multilayer functional film (col. 5 lines 7-10), such as photochromic film, sandwiched between them (col. 4 lines 11-15). These are restrictions of the appellant’s claims 1 and 3. The multilayer functional film is securely adhered to the polymeric substrates (the article in the present claims) via lamination (col. 16 line 5), meeting this method requirement in claims 4-5, 13-17, and 19.

Bhalakia et al. teaches that the polymeric substrates can be in the form of ophthalmic lenses (col. 4 line 59), which meets this restriction in claims 6 and 7, and may also include an anti-abrasion coating (col. 6 lines 55-58; col. 7 line 2), meeting this part of claims 8-10.

Claims 4 and 5 are product-by-process claims. In product-by-process claims, “once a product appearing to be substantially identical is found and a 35 U.S.C. 102 or

103 rejection is made, the burden shifts to the applicant to show an unobvious difference.” MPEP 2113. The applicant has not shown that the method by which the product is made causes the product to be patentably distinct from the product produced by the reference(s). Specifically, any structure that contains the elements of claims 4 and 5 where the laminable photochromic element is securely deposited on a polymeric surface will be the same as the element in these claims, regardless of if they are or are not fused or adhesively secured to the substrate. This rejection under 35 USC 103 is therefore proper because the “patentability of a product does not depend on its method of production.” *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Bhalakia et al. does not, however, meet the material restriction of claim 1 which includes a polyester urethane binder and a photochromic compound, though it does note that the composition of the functional portion of the invention may be changed to suit various applications (col. 19 lines 63-66).

Ormsby et al. shows a polyurethane binder that includes photochromic compounds (col. 4 lines 3-12). The polyurethane binder is a polyester urethane, made from polyester diols and polyisocyanates (col. 3 line 41), and is used in ophthalmic lenses (col. 2 lines 60-61) as part of a multilayer laminate structure (col. 2 lines 56-59). This meets the compositional requirements for the polyurethane binder of the appellant's claim 1.

At the time of the invention, it would have been prima facie obvious to a person of ordinary skill in the art to use the photochromic polyurethane composition in Ormsby et al. in the functional layer in Bhalakia et al. or the multilayer structure in Ormsby et al.

as the functional layer in Bhalakia et al. The motivation for doing so would be that the photochromic polyurethane composition in Ormsby et al. is known as a suitable and beneficial intermediate layer for photochromic lenses. Therefore, it would have been obvious to combine Ormsby et al. with Bhalakia et al. to obtain the invention as specified in claims 1, 3-10, 13-17, and 19.

Claims 1, 3-10, 13-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhalakia et al. in view of Rosthauser et al.

Bhalakia et al. and its deficiencies are discussed above. Rosthauser et al. discloses a polyester urethane binder (col. 3 lines 8-40) that contains a photochromic compound (col. 4 lines 16-24). The polyester urethane composition is used in ophthalmic lenses (col. 1 lines 19-20), among other uses.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the photochromic polyurethane composition in Rosthauser et al. as the functional layer in Bhalakia et al. The motivation for doing so would be that the photochromic polyurethane composition in Rosthauser et al. is known as a suitable and beneficial intermediate layer for photochromic lenses. Therefore, it would have been obvious to combine Rosthauser et al. with Bhalakia et al. to obtain the invention as specified in claims 1, 3-10, 13-17, and 19.

**(11) Response to Argument**

In response to the appellant's arguments that Bhalakia does not teach the claimed multilayered structure including a photochromic layer between two polymeric layers, note that Bhalakia refers to the sandwiching of photochromic layers between sheet layers in a number of passages. See col. 4 line 54-col. 5 line 36; col. 15 lines 1-10. The photochromic layers serve as functional members 20 or 21, which are sandwiched between a first and second sheet. See figure 3. The first and second sheets and the power portion are preferably made from the same material, where polycarbonate is noted (col. 10 lines 21-40). Thus, the reference clearly indicates a structure including a photochromic layer sandwiched between two polymer layers. The secondary references have been provided to show the conventionality of the claimed polyester urethane binder for the photochromic compounds.

The secondary references have shown the use of polyester urethane photochromic layers in multilayered materials and have also shown the use of such photochromic layers in ophthalmic lens applications. Thus, it is the examiner's position that the references are combinable.

Regarding the appellant's arguments that the present invention solves a problem not recognized by Bowles, note that the Bowles reference is not currently relied upon by the examiner for rejection of the claims.

In response to the appellant's arguments that the secondary references do not indicate the benefits of a laminable layer, it is first noted that the primary reference indicates a laminable structure. It is also noted that Ormsby indicates the adhesion to



two polymeric thermoplastic sheets (col. 3 lines 4-20). Rosthauser indicates the formation of thin films (examples), where Bhalakia indicates the use of such thin films as photochromic layers for the laminate structures (col. 14 lines 4-24). Thus, it is the examiner's position that the *combination* of references would yield the claimed invention.

Regarding the applicant's arguments that the references do not address dry fatigue, it is first noted that this property is not present in the claims. It is also noted that Ormsby indicates enhanced fatigue resistance by the use of the inventive polyurethane photochromic material. It is the examiner's position that the combined references would suggest a laminate having the enhanced photochromic material.

In response to the applicant's arguments of unexpected results, it has been the examiner's position that there is insufficient evidence to suggest such unexpected results. The examples in the current specification show one laminate having a polyether urethane photochromic layer as a comparative example to the inventive laminate having a polyester urethane photochromic layer. The showing of one polyester urethane layer-containing laminate does not represent a trend of unexpectedly beneficial properties. Also, because only one polyester urethane is used, the examples are not commensurate in scope with the claims, which encompass all polyester urethane binders with all photochromic compounds. Furthermore, the primary reference teaches the use of binder materials for the photochromic layer, including cellulose acetate butyrate as the preferred binder (col. 7 lines 23-37). The comparative examples

Application/Control Number: 09/854,419

Page 9

Art Unit: 1711

show the use of polyether urethane binders. Thus, the examples and comparative examples do not represent a comparison of the closest prior art.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

mdb

October 29, 2003

Conferees

James Seidleck *JS*

Vasu Jagannathan *Van Jagannathan*

*James J. Seidleck*  
James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700

MARK A. LITMAN & ASSOCIATES, P.A.  
York Business Center, Suite 205  
3209 W. 76th St.  
Edina, MN 55402